1	rschel
N	CRIF Error Corrected by th STIC Systems Branch  CRIF Processing Date: 6/2  Edited by: 4////  Changed a file from non-ASCII to ASCII
	Changed the margins in cases where the sequence text was "wrapped" down to the next line.
	Edited a format error in the Current Application Data section, specifically:
	Edited the Current Application Data section with the actual current number. The number inputted by the applicant was the prior application data; or other
	Added the mandatory heading and subheadings for "Current Application Data".
	Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer
	Changed the spelling of a mandatory field (the headings or subheadings), specifically:
	Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:
	Inserted of corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:
	Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
	Inserted colons after headings/subheadings. Headings edited included:
	Deleted extra, invalid, headings used by an applicant, specifically:
	Deleted:   non-ASCII "garbage" at the beginning/end of files;   secretary initials/filename at end of f  page numbers throughout text;   other invalid text, such as
	Inserted mandatory headings, specifically: Seg 15 - while (i) SER CHARGE Les
	Corrected an obvious error in the response, specifically:
	Edited identifiers where upper case is used but lower case is required, or vice versa.
	Corrected an error in the Number of Sequences field, specifically:
,	A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
D.	eleted <i>ending</i> stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error u to a Patentin bug). Sequences corrected:
	Other:
•	

xaminer: Th above corrections must b communicated to th applicant in the first Office Action. DO NOT's nd a copy of this form.

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/319,411A

DATE: 06/27/1999 TIME: 15:51:11

INPUT SET: S32328.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

# ENTERED

1		SEQUENCE LISTING
2	(1) G	eneral Information:
4	(-,	
5 6	(i)	APPLICANT: Nielsen, et al.
7	(ii)	TITLE OF INVENTION: PEPTIDE NUCLEIC ACID CONJUGATES
9	(iii)	NUMBER OF SEQUENCES: 148
11 12 13	(iv)	CORRESPONDENCE ADDRESS:  (A) ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & Norris
14 15		(B) STREET: One Liberty Place 46th. Floor (C) CITY: Philadelphia
16		(D) STATE: PA
17		(E) COUNTRY: USA
18		(F) ZIP: 19103
19		
20	(♥)	COMPUTER READABLE FORM:
22		(A) MEDIUM TYPE: Floppy disk (B) COMPUTER: IBM PC compatible
23		(C) OPERATING SYSTEM: PC-DOS/MS-DOS
24		(D) SOFTWARE: PatentIn Release #1.0. Version #1.25
25		(b) belinker ratement kerease with, relatem with
26	(vi)	CURRENT APPLICATION DATA:
27		(A) APPLICATION NUMBER: 08/319,411
8		(B) FILING DATE: 06-OCT-94
29		(C) CLASSIFICATION:
30		
31	(vii)	PRIOR APPLICATION DATA:
32 33		(A) APPLICATION NUMBER: US 08/108,591
34		(B) FILING DATE: 27-AUG-1993
35		(C) CLASSIFICATION:
36	(vii)	PRIOR APPLICATION DATA:
37	( /	(A) APPLICATION NUMBER: EP/01219
38		(B) FILING DATE: 22-MAY-1992
39		(C) CLASSIFICATION:
0		
1	(vii)	PRIOR APPLICATION DATA:
12		(A) APPLICATION NUMBER: US 08/088,658
13		(B) FILING DATE: 02-JUL-1993
4		(C) CLASSIFICATION:
5		
6	(Vii)	PRIOR APPLICATION DATA:

99

DATE: 06/27/1999 TIME: 15:51:11

INPUT SET: S32328.raw

47 (A) APPLICATION NUMBER: US 08/088,661 48 (B) FILING DATE: 02-JUL-1993 49 (C) CLASSIFICATION: 50 51 (vii) PRIOR APPLICATION DATA: 52 (A) APPLICATION NUMBER: US 08/275,951 5.3 (B) FILING DATE: 15-JUL-1994 54 (C) CLASSIFICATION: 55 56 (viii) ATTORNEY/AGENT INFORMATION: 57 (A) NAME: Straher, Michael P. 58 (B) REGISTRATION NUMBER: 38,325 59 (C) REFERENCE/DOCKET NUMBER: ISIS-1158 60 6-1 (ix) TELECOMMUNICATION INFORMATION: 62 (A) TELEPHONE: 215-568-3100 6.3 (B) TELEFAX: 215-568-3439 64 65 66 (2) INFORMATION FOR SEO ID NO:1: 67 68 (i) SEQUENCE CHARACTERISTICS: 69 (A) LENGTH: 4 base pairs 70 (B) TYPE: nucleic acid 71 (C) STRANDEDNESS: single 72 (D) TOPOLOGY: linear 73 74 (ii) MOLECULE TYPE: nucleic acid 75 76 (xi) SEQUENCE DESCRIPTION: SEO ID NO:1: 77 78 GCAT 79 80 81 (2) INFORMATION FOR SEQ ID NO:2: 82 83 (i) SEQUENCE CHARACTERISTICS: 84 (A) LENGTH: 4 base pairs 85 (B) TYPE: nucleic acid 86 (C) STRANDEDNESS: single 87 (D) TOPOLOGY: linear 88 89 (ii) MOLECULE TYPE: nucleic acid 90 91 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2: 92 93 CCAT 94 95 96 (2) INFORMATION FOR SEO ID NO:3: 97 98 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 4 base pairs

152

## RAW SEQUENCE LISTING PATENT APPLICATION US/08/319,411A

DATE: 06/27/1999 TIME: 15:51:12

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	01	(C) STRANDEDNESS: single	
1	02	(D) TOPOLOGY: linear	
1	03		
1	04	(ii) MOLECULE TYPE: nucleic acid	
1	05	. ,	
1	06	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3	
	07	(AI) SEQUENCE DESCRIPTION: SEQ ID NO:3	
	08	GCAT	
	09	GCAI	4
	10		
	11	(2) INFORMATION FOR SEQ ID NO:4:	
	12		
	13	<ul><li>(i) SEQUENCE CHARACTERISTICS:</li></ul>	
	14	(A) LENGTH: 4 base pairs	
1	15	(B) TYPE: nucleic acid	
1.	16	(C) STRANDEDNESS: single	
1.	17	(D) TOPOLOGY: linear	
1	18	, ,	
10	19	(ii) MOLECULE TYPE: nucleic acid	
	20	() Hendedd IIId: Maciele acid	
	21	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4	
	22	(MI) SEQUENCE DESCRIPTION: SEQ ID NO:4	
	2.3	GCAT	
	24	GCAI	4
	25		
	26	(2) INFORMATION FOR SEQ ID NO:5:	
	27		
	28	<ul><li>(i) SEQUENCE CHARACTERISTICS:</li></ul>	
	29	(A) LENGTH: 4 base pairs	
13		(B) TYPE: nucleic acid	
13		(C) STRANDEDNESS: single	
13	32	(D) TOPOLOGY: linear	
13			
13	34	(ii) MOLECULE TYPE: nucleic acid	
13	35		
13	36	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5	
13	37	, , , , , , , , , , , , , , , , , , ,	•
13	88	GCAT	4
13	9		4
14			
14		(2) INFORMATION FOR SEQ ID NO:6:	
14		(2) INTORMATION FOR SEQ ID NO:6:	
14		(i) CROUTYGE GUARAGES	
14		(i) SEQUENCE CHARACTERISTICS:	
14		(A) LENGTH: 4 base pairs	
		(B) TYPE: nucleic acid	
14		(C) STRANDEDNESS: single	
14		(D) TOPOLOGY: linear	
14	-		
14		(ii) MOLECULE TYPE: nucleic acid	
15			
15	1	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:	

DATE: 06/27/1999 TIME: 15:51:12

153	GCAT	4	
154			
155			
156			
157	(2) INFORMATION FOR SEO ID NO:7:		
158			
159	(i) SEQUENCE CHARACTERISTICS:		
160	(A) LENGTH: 4 base pairs		
161	(B) TYPE: nucleic acid		
162	(C) STRANDEDNESS: single		
163	(D) TOPOLOGY: linear		
164	(D) TOPOLOGI: linear		
165	(44) MOLDOUED WIND 1-1 13		
	(ii) MOLECULE TYPE: nucleic acid		
166	i-a,		
167	(Xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:		
168			
169	GCAT	4	
170			
171			
172	(2) INFORMATION FOR SEQ ID NO:8:		
173			
174	<ul><li>(i) SEQUENCE CHARACTERISTICS:</li></ul>		
175	(A) LENGTH: 4 base pairs		
176	(B) TYPE: nucleic acid		
177	(C) STRANDEDNESS: single		
178	(D) TOPOLOGY: linear		
179	• •		
180	(ii) MOLECULE TYPE: nucleic acid		
181	(,		
182	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:		
183	(,g Date Dag and		
184	GCAT	4	
185		•	
186			
187	(2) INFORMATION FOR SEO ID NO:9:	•	
188	(2) INCOMMATION FOR SEQ ID NO. 9.		
189	(i) SEQUENCE CHARACTERISTICS:		
190			
191	(A) LENGTH: 4 base pairs		
192	(B) TYPE: nucleic acid		
	(C) STRANDEDNESS: single		
193	(D) TOPOLOGY: linear		
194			
195	(ii) MOLECULE TYPE: nucleic acid		
196			
197	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:		
198			
199	GCAT	4	
200			
201			
202	(2) INFORMATION FOR SEQ ID NO:10:		
203	· · · · · · · · · · · · · · · · · · ·		
204	(i) SEQUENCE CHARACTERISTICS:		
205	(A) LENGTH: 4 base pairs		

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/319,411A

DATE: 06/27/1999 TIME: 15:51:13

206			(B) TYPE: nucleic acid					
207			(C) STRANDEDNESS: single					
208			(D) TOPOLOGY: linear					
209								
210		(ii)	MOLECULE TYPE: nucleic acid					
211		, ,						
212		(vi)	SEQUENCE DESCRIPTION: SEQ ID	NO.10.				
213		( \ \ \ )	SEQUENCE DESCRIPTION. SEQ ID	10.10.				
214	GCA'							
214	GCA	1.			4			
216								
217	(2)	INFO	RMATION FOR SEQ ID NO:11:					
218								
219		(i)	SEQUENCE CHARACTERISTICS:					
220			<ul><li>(A) LENGTH: 4 base pairs</li></ul>					
221			(B) TYPE: nucleic acid					
222			(C) STRANDEDNESS: single					
223			(D) TOPOLOGY: linear					
224			(b) Toronour: Timear					
225		(44)	MOLECULE TYPE: nucleic acid					
226		(11)	MOLECULE TIPE: Nucleic acid					
227		(X1)	SEQUENCE DESCRIPTION: SEQ ID	NO:II:				
228								
229	GCA'	Г			4			
230								
231								
232	(2)	INFOR	RMATION FOR SEQ ID NO:12:					
233								
234		(i)	SEQUENCE CHARACTERISTICS:					
235		. ,	(A) LENGTH: 4 base pairs					
236			(B) TYPE: nucleic acid					
237			(C) STRANDEDNESS: single					
238			(D) TOPOLOGY: linear					
239								
240		(11)	MOLECULE TYPE: nucleic acid					
241			1					
242		(xi)	SEQUENCE DESCRIPTION: SEQ ID	NO:12:				
243								
244	GCA'	r			4			
245								
246								
247	(2)	INFO	RMATION FOR SEQ ID NO:13:					
248	12)	2	MILLION TON DEG ID NO.13.					
249		111	SEQUENCE CHARACTERISTICS:					
		(1)						
250			(A) LENGTH: 4 base pairs					
251			(B) TYPE: nucleic acid					
252			(C) STRANDEDNESS: single					
253			(D) TOPOLOGY: linear					
254								
255		(ii)	MOLECULE TYPE: nucleic acid					
256								
257		(xi)	SEQUENCE DESCRIPTION: SEQ ID	NO:13:				
258		, /						

# SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/08/319,411A

DATE: 06/27/1999 TIME: 15:51:13

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Line

Error

Original Text

### RAW SEQUENCE LISTING PATENT APPLICATION US/08/319,411A

DATE: 06/22/1999 TIME: 17:40:47

INPUT SET: S32328.raw

This Raw Listing contains the General Information Section and those Sequences containing ERRORS.

1 2		SEQUENCE LISTING Does Not Compl	ly
3 4	(1)	General Information: Corrected Diskette N	eeaea
5	(i)	) APPLICANT: Nielsen, et al.	
7	(11)	) TITLE OF INVENTION: PEPTIDE NUCLEIC ACID CONJUGATES	
9 10	(iii)	) NUMBER OF SEQUENCES: 148	
11 12 13	(iv)	) CORRESPONDENCE ADDRESS: (A) ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & Norris	
14 15 16 17 18 19		(B) STREET: One Liberty Place 46th. Floor (C) CITY: Philadelphia (D) STATE: PA (E) COUNTRY: USA (F) ZIP: 19103	
20 21 22 23 24 25	(∨)	) COMPUTER READABLE FORM:  (A) MEDIUM TYPE: Floppy disk  (B) COMPUTER: IBM PC compatible  (C) OPERATING SYSTEM: PC-DOS/MS-DOS  (D) SOFTWARE: Patentin Release #1.0, Version #1.25	
26 27 28 29	(vi)	CURRENT APPLICATION DATA:  (A) APPLICATION NUMBER: 08/319,411 (B) FILING DATE: 06-0CT-94 (C) CLASSIFICATION:	
31 32 33 34 35	(vii)	PRIOR APPLICATION DATA:  (A) APPLICATION NUMBER: US 08/108,591  (B) FILING DATE: 27-AUG-1993  (C) CLASSIPICATION:	
36 37 38 39	(Vii)	PRIOR APPLICATION DATA: (A) APPLICATION NUMBER: EP/01219 (B) FILING DATE: 22-MAY-1992 (C) CLASSIFICATION:	
41 42 43 44	(vii)	PRIOR APPLICATION DATA: (A) APPLICATION NUMBER: US 08/088,658 (B) FILING DATE: 02_JUL-1993 (C) CLASSIFICATION:	

### RAW SEQUENCE LISTING PATENT APPLICATION US/08/319,411A

DATE: 06/22/1999 TIME: 17:40:48

			INDUT CET. C22220
	46 47	(Vii) PRIOR APPLICATION DATA: (A) APPLICATION NUMBER: US 08/088,661	INPUT SET: S32328.raw
	48	(B) FILING DATE: 02-JUL-1993	
	49	(C) CLASSIFICATION:	
	50		
	51 52	(vii) PRIOR APPLICATION DATA:	
	52	(A) APPLICATION NUMBER: US 08/275,951	
	54	(B) FILING DATE: 15-JUL-1994 (C) CLASSIFICATION:	
	55	(C) CLASSIFICATION:	
	56	(viii) ATTORNEY/AGENT INFORMATION:	
	57	(A) NAME: Straher, Michael P.	
	58	(B) REGISTRATION NUMBER: 38,325	
	59	(C) REFERENCE/DOCKET NUMBER: ISIS-1158	
	60 61	<u></u>	
	62	(ix) TELECOMMUNICATION INFORMATION:	
	63	(A) TELEPHONE: 215-568-3100 (B) TELEFAX: 215-568-3439	
	64	(b) IBBERA: 215-566-5459	
	65		
ERF	RORED	SEQUENCES FOLLOW:	
		10)	
	633 634	(2) INFORMATION FOR SEQ ID NO:39:	
	635	(i) SEQUENCE CHARACTERISTICS:	
	636	(A) LENGTH: 5 base pairs	
	637	(B) TYPE: nucleic acid	
	638	(C) STRANDEDNESS: single	
	639	(D) TOPOLOGY: linear	
	640	44	
	641	(ii) MOLECULE TYPE: nucleic acid 39	
>	642 <b>643</b>	(ui) groupus	
/	644	(xi) SEQUENCE DESCRIPTION: SEQ ID NO (7):	
	645	TTCTT 5	
	646		
	1034	(2) INFORMATION FOR SEQ ID NO:66:	
	1035	and the second	
	1036 1037	(i) SEQUENCE CHARACTERISTICS:	
	1037	(A) LENGTH: 12 base pairs	
	1039	<ul><li>(B) TYPE: nucleic acid</li><li>(C) STRANDEDNESS: single</li></ul>	
	1040	(D) TOPOLOGY: linear	
	1041	(b) solobool. Illieat	
	1042	(ii) MOLECULE TYPE: nucleic acid	
	1043		
	1044		
	1045	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:	

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/319,411A

DATE: 06/22/1999 TIME: 17:40:48

1318   (2) INFORMATION FOR SEQ ID NO:85:   1319   (i) SCAULIUE (HMLATCHISTOS)    -> 1320   (a) LENGTH: 20 base pairs  -> 1321   (B) TYPE: nucleic acid  -> 1322   (C) STRANDEDNESS: single  -> 1323   (D) TOPOLOGY: linear   1324     1325   (ii) MOLECULE TYPE: nucleic acid   1326    -> 1327   (xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:   1328     1329   CTGTCTCCAT CCTCTTCACT   20   1330     1331	
> 1321 (B) TYPE: nucleic acid> 1322 (C) STRANDEDNESS: single> 1323 (D) TOPOLOGY: linear 1324 1325 (ii) MOLECULE TYPE: nucleic acid 1326> 1327 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:85: 1328 1329 1330 1331	
> 1321 (B) TYPE: nucleic acid> 1322 (C) STRANDEDNESS: single> 1323 (D) TOPOLOGY: linear 1324 1325 (ii) MOLECULE TYPE: nucleic acid 1326> 1327 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:85: 1328 1329 1330 1331	
> 1322 (C) STRANDEDNESS: single> 1323 (D) TOPOLOGY: linear 1324 1325 (ii) MOLECULE TYPE: nucleic acid 1326> 1327 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:85: 1328 1329 CTGTCTCCAT CCTCTTCACT 20 1330 1331	
> 1323 (D) TOPOLOGY: linear 1324 1325 (ii) MOLECULE TYPE: nucleic acid 1326> 1327 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:85: 1328 1329 1330 1331	
1324 1325 (ii) Molecule Type: nucleic acid 1326> 1327 1328 1329 CTGTCTCCAT CCTCTTCACT 20 1330 1331	
1325	
> 1327 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:85: 1329 1329 1330 1331	
1328 1329 CTGTCTCCAT CCTCTTCACT 20 1330 1331	
1328 1329 CTGTCTCCAT CCTCTTCACT 20 1330 1331	
1330 1331	
1331	
1332	

# SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/08/319,411A

DATE: 06/22/1999 TIME: 17:40:48

Line	Error	Original Text
643 1047 1320 1321 1322 1323 1327 1327	Wrong Sequence Number # of Sequences for line conflicts w/ running total Unknown or Misplaced Identifier Unknown or Misplaced Identifier Unknown or Misplaced Identifier Unknown or Misplaced Identifier Wrong or Missing Strandedness Value Wrong or Missing Sequence Topology	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7: CCAGGCUCAG AT 4 (A) LENGTH: 20 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (xi) SEQUENCE DESCRIPTION: SEQ ID NO:85: (xi) SEQUENCE DESCRIPTION: SEQ ID NO:85: